## Explanation of Tables Handed out at September 2, 2003 CRSP Operations Meeting

PowerProjections2003(avgusing5-03water,BrokerPrices)(amended).xls This table was first handed out at the June 10, 2003 Rates Informal Meeting – Explanation of columns from the left of the table.

**Gross Gen from Hydro LP** - This column contains the raw generation output from the Hydro LP model, for all power plants modeled, summed for the year. Input data for the Hydro LP case includes average (of 85 traces) water releases by dam by month based on the April 2003 hydrology study provided by Reclamation. Hydrology study uses initial conditions from April 2003, current UCRC depletion schedule, and assumes Interim Surplus Criteria water releases to the lower basin. The first 24 months of water releases are from the May2003 24-month study.

**Dolores Gen** - Forecasted generation from McPhee and Towaoc generating plants of the Dolores Project. It was forecasted by using Forecast Pro software based on historical generation from Reclamation PO&M 59 forms. Dolores generation is included in a separate column because the Hydro LP does not include either power plant in its model.

**Total SLIP Gross Generation** – The sum of the two columns above.

**Average Plant Use** – Power plant electrical use. This is an annual average computed by looking at plant use data contained in Reclamation's PO&M 59 forms. Plant use is not accounted for by the Hydro LP model, so is included here.

SLIP Net Gen @ Plant – The remainder after Average Plant Use is subtracted from Total SLIP Gross Generation.

**Losses** – This column is equal to 7.81 percent of the **SLIP Net Gen** @ **Plant** column.

SLIP Net Gen @ Load - The remainder after Losses are subtracted from SLIP Net Gen @ Plant.

**Total Firm Load** – This column displays the total SHP energy allocation to customers.

**USBR Use (GWh)** – This column displays estimated total future annual project use. It was taken from Reclamation's March 18, 2003 memo to Western Area Power Administration.

Total Load - The sum of the two columns immediately above.

**Purch** @ **Load** – The difference between **SLIP Net Gen** @ **Load** and **Total Load** if that difference is a negative number. That is, the estimated need for firming purchases.

Sales @ Load - The difference between SLIP Net Gen @ Load and Total Load if that difference is a positive number. That is, the estimated AHP energy available to deliver to customers.

**Purch** @ **Plant** – This column is the **Purch** @ **Load** values increased by 7.81 percent to account for losses incurred in delivering firming purchases to customers.

**Market Price** – An estimate of the composite cost of purchasing firming energy. The number was based on broker future prices for the years 2005-2010, assuming 60% on peak purchases and 40% off peak purchases.

**Purchase Expense - Purch @ Plant** multiplied by **Market Price.** This column represents the estimate of firming purchase costs.

**Sales Revenue** - **Sales** @ **Load** multiplied by the \$9.50/MWh SLIP energy rate. This column represents revenue for sales of energy to customers above the 6007 GWh SHP level.

## FORECASTED GENERATION & PURCHASES WHEN LOAD IS BASED ON 20-YEAR AVERAGE – Explanation of columns from the left of the table.

**Net Gen** – Output from the Forecast Pro forecasting model for all power plants modeled, summed for the year. Input data for the forecast model case includes average (of 85 traces) water releases by dam by month based on the August 2003 hydrology study provided by Reclamation. Hydrology study uses initial conditions from July or August of 2003, current UCRC depletion schedule held constant after 2009, and assumes Interim Surplus Criteria water releases to the lower basin.

The generation has had losses taken out by reducing Glen Canyon generation by 8.8 percent and all other generation by 5.5 percent. It includes generation forecasts for all SLIP power plants. Since the forecasting model is based on historical net generation (after plant use has been subtracted out) from Reclamation PO&M 59 forms, no adjustment for plant use is made. The first 24 months of water releases are from the August 2003 24-month study. This column corresponds to the **SLIP Net Gen** @ **Load** column in the previous table above

**Total Firm** – This number is calculated by subtracting the ultimate development project use energy amount from the 20-year average (2005-2024) of the generation in the **Net Gen** column.

**Project Use** – This column displays estimated total future annual project use. It was taken from Reclamation's March 18, 2003 memo to Western Area Power Administration. It corresponds to the **USBR Use (GWh)** column in the previous table above.

**Total Load** - The sum of the two columns immediately above. It corresponds to the **Total Load** column in the previous table above.

**Purch** @ **Load** – The difference between **Net Gen** and **Total Load** if that difference is a negative number. That is, the estimated need for firming purchases. It corresponds to the **Purch** @ **Load** column in the previous table above.

**AHP Sales** - The difference between **Net Gen** and **Total Load** if that difference is a positive number. That is, the estimated AHP energy available to deliver to customers. It corresponds to the **Sales** @ **Load** column in the previous table above.

**Purch** @ **Plant** – This column is the **Purch** @ **Load** values increased by 7.81 percent to account for losses incurred in delivering firming purchases to customers. It corresponds to the **Purch** @ **Plant** column in the previous table above.

**Market Price** – An estimate of the composite cost of purchasing firming energy. The number was based on broker future prices for the years 2005-2010, assuming 60% on peak purchases and 40% off peak purchases. It corresponds to the **Market Price** column in the previous table above.

**Purchase Expense - Purch @ Plant** multiplied by **Market Price.** This column represents the estimate of firming purchase costs.